QAPP Worksheet #23 (UFP-QAPP Manual Section 3.2.1) Analytical SOP References Table[a]

Reference Number[a,b,c]	Primary Method Reference[b]	Laboratory SOP Title, Revision Date, and/or Number	Definitive or Screening Data	Analytical Group	Instrument	Organization Performing Analysis	Modified for Project Work? (Y/N)
AP-3	EPA 1668A[d]	High Resolution Mass Spectrometry Method 1668A for Solid/Air/Aqueous/Tissue Matrices, AP-CM-7, Rev. 9-1, 10/8/2010, modified as appropriate per the SOP addendum for High Volume Sampling, 5/22/12	Definitive	Organics (PCB Congeners)	High Resolution Gas Chromatograph/ High resolution Mass Spectrometer (HRGC/HRMS)	Analytical Perspectives, Wilmington, NC	Toluene Soxhlet /Dean Stark (SDS) extraction option is specified; Static spikes and Dynamic spikes added for sorption media samples
AP-1	EPA 1613B[e]	Polychlorinated Dibenzo Dioxin/Furans, AP-CM-5, Rev. 15, 10/8/2010, modified as appropriate per the SOP addendum for High Volume Sampling, 5/22/12	Definitive	Organics (PCDD/Fs)	HRGC/HRMS	Analytical Perspectives, Wilmington, NC	Toluene/SDS extraction option specified; Static spikes and Dynamic spikes added for sorption media samples
C-16	EPA 440[f]	Sample Preparation for Particulate Carbon and Nitrogen and Particulate Organic Carbon in Water by Combustion / Thermo-Conductivity or Infrared Detection, GEN-PC PN POC PREP, Rev. 01, 7/3/2009	Definitive	General Chemistry	Total Organic Carbon (TOC) Analyzer	CAS-Tucson, AZ	N, note the nominal pore size of the GF/F filter used must be 0.7 um. POC and DOC will be performed on sample from the same container
C-13	Standard Methods (SM) 5310C[g]	Total Organic Carbon in Water, GEN-TOC, Rev. 11, 2/19/2010	Definitive	General Chemistry	TOC Analyzer (Persulfate Oxidation Method)	CAS-Kelso, WA	N, note DOC and POC will be performed on samples from the same container

QAPP Worksheet #23 (UFP-QAPP Manual Section 3.2.1) Analytical SOP References Table[a]

C-17	American Society for Testing and Materials (ASTM) D 3977[h]	Standard Test Methods for Determining Sediment Concentration in Water Samples, GEN-D3977, Rev. 0, 7/11/2011	Definitive	General Chemistry	Analytical Balance	CAS-Kelso, WA	N, Note Test Option B without the 14 day settling time will be used. The nominal pore size of the GF/F filter used must be 0.7 um.

[a] All SOPs are contained in Appendix B.

[b] It is expected that the procedures outlined in these SOPs will be followed. Procedural modifications to individual SOPs may be warranted depending upon an individual sample matrix, interferences encountered, or limitations imposed by the procedure. Deviations from individual SOPs will be documented in the laboratory records. Substantive modification to any SOP will be approved in advance by the AECOM Project QA Manager and AECOM Task Manager and communicated to the CPG Coordinator and to the USEPA RPM. The ultimate procedure employed will be documented in the report summarizing the results of the sampling event or field activity.

[c] The reference numbers presented in this worksheet use a numbering system that is consistent between the current sediment characterization programs (i.e., RM 10.9, LRC SSP). However, only the reference numbers and associated SOPs for the HV CWCM are presented in this Worksheet #23.

[d] USEPA 2003

[e] USEPA 1994

[f] USEPA 1997

[g] American Public Health Association (APHA) 1998

[h] ASTM 2010